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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/582,378	08/31/2006	Helge-Ruben Halse	007831.00005	3870

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EXAMINER

MULLER, BRYAN R

ART UNIT	PAPER NUMBER
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3727

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10/31/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/582,378	Applicant(s) HALSE, HELGE-RUBEN	
	Examiner BRYAN R. MULLER	Art Unit 3727	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 June 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the non-segmented drive ring and non segmented housing of the backup tongs (claims 3, 12 and 13) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. The drawings clearly show the drive ring as a segmented drive ring, showing only one segment (36) and the drawings also fail to clearly support that the housing of the backup tong is non-segmented, wherein the backup tong housing actually appears to be segmented in the drawings, at least having a separable top (shown removed in Fig. 2), which may be considered to be a segment of the housing.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New

Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 3-7, 12 and 13 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The original disclosure does not support that the drive ring of the power tong is non-segmented or that the backup tong housing is non-segmented. The only disclosure the applicant includes in the original specification regarding a non-segmented portion is in paragraph [0005], which discloses that it is known in the art that certain power tongs may be provided with non-segmented drive rings. However, the applicant does not disclose that either the drive ring or the housing for the backup tongs is non-segmented. To the contrary, the applicant's original disclosure indicates that the drive ring of the present invention is formed of "two-crescent shaped jaw groups" (paragraph 32), which may clearly be considered to be

segments of the drive ring and the original specification and drawings show that the backup tong housing has an upper cover that is removable (as seen in Fig. 2; paragraph 24), wherein the cover may clearly be a separate segment of the backup tong housing. Thus, the original disclosure not-only fails to support that the drive ring of the power tong is non-segmented or that the backup tong housing is non-segmented but actually appears to disclose that both the drive ring and the backup tong housing *are* segmented.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 3-7, 12 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. As discussed supra, it is unclear how the drive ring and the backup tong housing may be non-segmented, as claimed, when they are both disclosed in the application as clearly being segmented parts.

6. Claims 3-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The preamble of claims 3 and 8 indicate that a method for disconnecting a pipe length is being claimed. However, lines 13 and 14 of claim 3 and lines 11 and 12 of claim 8 disclose that the step of "securing the pipe length to the pipe string" is part of the method for disconnecting a pipe length. It is unclear how connecting a pipe length to a pipe string can possibly be considered to be a

method step of disconnecting a pipe length from a pipe string. For the sake of the current Office Action, the claim will be construed as disclosing a method for connecting and disconnecting a pipe length from a pipe string.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carlson (2003/0056623) in view of Stogner (6,505,531).

9. In reference to claim 8, Carlson discloses an assembly (10) for connecting or disconnecting a pipe length to or from a substantially horizontal pipe string, the assembly comprising a power tong (200), a back-up tong (300) a pair of guide columns (90) each having a pitch rack (70), at least one cog (414), at least one hydraulic cylinder (104) and a work area (between tongs 200 and 300) wherein the power tong and back-up tong are movable relative to each other through operation of the hydraulic cylinder (paragraph 68) and the power tong and back-up tong are movable along the columns through operation of the (at least one) cog along the pitch rack (paragraph 91). Carlson further discloses that the assembly is preferably mounted on a chassis (paragraphs 49-50) wherein a method of connecting and disconnecting a pipe length from a pipe string using the assembly of Carlson would inherently comprise the steps of providing the

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chassis, providing the assembly, as discussed supra, providing a pipe length, securing the pipe length to a pipe string having a connecting point defined at the point where the pipe length is secured to the pipe string (step of connecting the pipe length) and disconnecting the pipe length from the pipe string will include the step of adjusting the height of the assembly to place the connecting point in the work area of the assembly and any point during the method of connecting or disconnecting of the pipe length wherein the cog (414) is not moving to move the back-up tong and power tong relative to the guide columns, the back-up tong may be considered to be locked to the one or more guide columns by the non-moving cog. However, Carlson fails to disclose that the guide columns are removable from the chassis or that a method of disconnecting a pipe length from a pipe string would include a step of disconnecting the guide columns from the chassis. Stogner discloses an apparatus that is similar to the apparatus of Carlson in that Stogner also discloses a power tong (114) and a back-up tong (108) that are positioned relative to one another such that a work area is located between the tongs, and Stogner also discloses a spinning device (118) for rotating the pipe lengths being connected or disconnected from a pipe string. However, Stogner discloses that the assembly is intended for use on substantially vertical pipe strings wherein the assembly is positioned upright and suspended from a hoisting harness (120') to adjust the position of the assembly relative to the pipe length and pipe string. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to form the assembly of Carlson to be removably connected from the chassis and to have a hoisting harness, as taught by Stogner, so that the assembly of Carlson may be used

to connect and disconnect pipe length to and from substantially horizontal pipe strings when connected to the chassis or alternatively may be disconnected from the chassis and suspended from the hoisting harness to connect and disconnect pipe length to and from substantially vertical pipe strings, thus providing the assembly of Carlson with multiple applications, making the assembly more versatile and reducing the need for separate assemblies for use on horizontal and vertical pipe strings, which will reduce the cost of equipment, maintenance and repairs. Therefore, the method of disconnecting a pipe length from a substantially vertical pipe string using the assembly disclosed by the combination of Carlson and Stogner, will comprise all of the steps for removing a pipe length, as discussed supra, and will further include the step of removing the assembly, including the guide columns from the chassis of Carlson and suspending the assembly from a hoisting harness prior to the step of adjusting the height of the assembly to place the connecting point in the work area of the assembly.

10. In reference to claims 9-11, the method of disconnecting a pipe length from a pipe string using the assembly of Carlson and Stogner would obviously further comprise all of the steps disclosed in claims 9-11.

11. Claims 3-7, 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carlson (2003/0056623) in view of Stogner (6,505,531) as applied to claim 8 and further in view of Wilms (3,838,613).

12. In reference to claim 3, the combination of Carlson and Stogner, as discussed supra, will provide the structure and method steps for disconnecting a pipe length from

a pipe string, including the steps of engaging the pipe length with the drive ring of the power tongs and engaging the pipe string with the backup tongs, but Carlson and Stogner fail to disclose that the drive ring and backup tong housing may be non-segmented. Wilms discloses a similar assembly for connecting or disconnecting a pipe length to or from a pipe string that is old and well known in the art and Wilms further teaches that the assembly includes a power tong (T) having a non-segmented drive ring and a backup tong (B) having a non-segmented housing (as seen in Fig. 2), wherein the non-segmented drive ring and backup tong housing will ensure that each of the power tong and backup tong may securely grip the pipe length or pipe string by surrounding the pipe around the entire circumference and will prevent accidental disengagement of the pipe by the power tong or backup tong by fully encompassing the pipe. Therefore, it further would have been obvious to one of ordinary skill in the art at the time the invention was made that the power tong and backup tong of Carlson may be replaced by the power tong and backup tong of Wilms, being known power and backup tongs, which include a non-segmented drive ring in the power tong and a non-segmented housing for the backup tong, as taught by Wilms to ensure that each of the power tong and backup tong may securely grip the pipe length or pipe string and prevent accidental disengagement of the pipe by the power tong or backup tong. Thus, the steps of engaging the pipe length with the drive ring of the power tongs and engaging the pipe string with the backup tongs, as taught by Carlson and Stogner, would obviously include encircling the pipe length with the non-segmented drive ring of the power tongs and encircling the pipe string with the non-segmented housing of the backup tongs.

13. In reference to claims 4-6, the method of disconnecting a pipe length from a pipe string using the assembly of Carlson and Stogner would obviously further comprise all of the steps disclosed in claims 4-6.

14. In reference to claim 7, as discussed supra, any point during the method of connecting or disconnecting of the pipe length wherein the cog (414) is not moving to move the back-up tong and power tong relative to the guide columns, the back-up tong may be considered to be locked to the one or more guide columns by the non-moving cog. Thus, the method disclosed by Carlson, Stogner and Wills would obviously include the step of locking the back-up tong to the one or more guide column.

15. In reference to claims 12 and 13, when the power tong and backup tong of Carlson are replaced by the power tong and backup tong of Wilms, as discussed supra, the steps of engaging the pipe length with the drive ring of the power tongs and engaging the pipe string with the backup tongs, as taught by Carlson and Stogner, would obviously include encircling the pipe length with the non-segmented drive ring of the power tongs and encircling the pipe string with the non-segmented housing of the backup tongs.

Response to Arguments

16. Applicant's arguments with respect to claims 3-6 have been considered but are moot in view of the new ground(s) of rejection. The Wilms reference has been added to the previous prior art rejection to provide the non-segmented portions as claimed.

17. Applicant's arguments filed 6/27/2008 have been fully considered but they are not persuasive. The applicant's argument that the prior art fails to include a step of locking the back-up tongs to the one or more guide column is not considered to be persuasive because, as discussed supra, the structure provided by Carlson is capable of effectively "locking" the back-up tong to the guide column at any point in which the cog (414) is not moving to move the power tong and backup tong relative to the guide column, wherein the method disclosed by Carlson and Stogner will clearly include steps wherein the cog is not moving.

Conclusion

18. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRYAN R. MULLER whose telephone number is (571)272-4489. The examiner can normally be reached on Monday thru Friday 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Monica S. Carter can be reached on (571) 272-4475. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Bryan R Muller/
Examiner, Art Unit 3727
10/28/2008